

DETAILED ACTION

1. The following is a non-final, first office action upon examination of application number 10/720,901. Claims 1-5 are pending and have been examined on the merits discussed below.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: system components for the methods described in claims 1-5. For example, structural elements of a computer system that would perform the methods, or two or more computers with structural elements that would perform the methods of claims 1-5.

5. Further, Claims 1-5 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly

and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

6. Additionally, it seems that claim 2 depends from claim 1, yet contains the limitation, "A mathematical integer or combination of integers resulting from the calculating in paragraph c1..." For the purpose of examination, Examiner is considering this limitation to read – The mathematical system of claim 1, wherein the percentage of buying households is then indexed...

7. Claim 1 recites the limitation "divide **the** total number of customer households" in line 5. and "**the** number of total households... in lines 5-6" There is insufficient antecedent basis for these limitation in the claim. Examiner assumes that a customer household is a consumer household and for the purpose of examination will read the term as such. Appropriate correction is required.

8. Claim 3 recites the limitation "**the** individual personal information of **the** consumers that purchase consumer oriented products and/or services" in lines 1-. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

9. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed.

Cir. 1999). The term "integer" in claim 2 is used by the claim to mean "a percentage", while the accepted meaning is "a whole number." The term is indefinite because the specification does not clearly redefine the term. For the purpose of examination, Examiner will read the term as -- the percentage of buying households. Appropriate correction is required.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 1-5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

12. As per claims 1 and 3-5, they are directed to a mathematical system. However, there are no system elements in the claim limitations. The mathematical systems as claimed are not a process since the claim language does not recite a series of steps or acts to be performed but instead recites a system; the claims are not a machine since they do not recite any components of machine; and the claims are not a manufacture nor a composition of matter since no manufacture or composition of matter is claimed. Thus, the claims are directed towards non-statutory subject matter.

13. As per claim 2, it recites a mathematical integer or combination of integers. Since an integer or group of integers is not a process, machine, manufacture, or composition of matter, the claim is directed towards non-statutory subject matter.

Further, it appears that claim 2 depends from claim 1 and is also rejected for the same reasons set forth above.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claim 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Eldering (US 6,216,129).

16. As per claim 3, Eldering teaches a mathematical system of demographic measurement that does not infringe on individual personal information of the consumer that purchase consumer oriented products and/or services (col. 1, line 66-col. 2, line 4 teaches privacy concerns are also an important factor in using consumer purchase information, where consumers will find it desirable that advertisements and other information is matched with their interest, but will now allow indiscriminate access to their demographic profile or purchase records; col. 12, lines 50-55 teaches measurements, correlations, projections on he consumer basis vectors are not made available in order to protect consume privacy).

17. As per claim 4, Eldering teaches a mathematical system of demographic measurement that isolates product and/or service demand in a predefined physical household group or socio economic group of households in relationship to total

households in the group (col. 6, lines 27-67 and col. 7, lines 1-14 teach maintaining a consumer profile server which contains the characterization of consumers such as point of purchase information from various outlets including a grocery store, department stores, other retail outlets, or a web site or other location where a purchase request is received and processed. Further, col. 7, lines 22-54 teach demographic characterization by several categories including age, gender, household size, income range, interests, etc.. Col. 10, lines 26-34 teaches the consumer profiling system tracks purchases by the consumer ID; col. 11, lines 19-49 teaches consumer profiling system which retrieves a product demographics vector obtained from the set of heuristic rules and applies the product demographic vector to the demographic characterization vector and the product preference vector from the consumer profile).

18. As per claim 5, Eldering teaches a mathematical system of household demographic measurement that measures sales for many types of consumer products and/or consumer service companies and not just one type of product/service (col. 6, lines 27-67 and col. 7, lines 1-14 teach maintaining a consumer profile server which contains the characterization of consumers such as point of purchase information from various outlets including a grocery store, department stores, other retail outlets, or a web site or other location where a purchase request is received and processed. Further, col. 7, lines 22-54 teach demographic characterization by several categories including age, gender, household size, income range, interests, etc.. Col. 10, lines 26-34 teaches the consumer profiling system tracks purchases by the consumer ID; col. 11, lines 19-49 teaches consumer profiling system which retrieves a product

demographics vector obtained from the set of heuristic rules and applies the product demographic vector to the demographic characterization vector and the product preference vector from the consumer profile; Figs 2D and 3B teach multiple products).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering (US 6,216,129).

21. As per claim 1, Eldering teaches a mathematical system of measurement that has the propensity to track and measure sales of a consumer oriented product/service by physical household address in a predefined household group or combination of household groups that have previously purchased consumer oriented products/service (col. 6, lines 27-67 and col. 7, lines 1-14 teach maintaining a consumer profile server which contains the characterization of consumers such as point of purchase information from various outlets including a grocery store, department stores, other retail outlets, or a web site or other location where a purchase request is received and processed. Further, col. 7, lines 22-54 teach demographic characterization by several categories including age, gender, household size, income range, interests, etc.. Col. 8, lines 13-19 teaches the consumer ID can be the consumer address, which according to col. 10,

lines 26-34 the consumer profiling system tracks purchases by the consumer ID, or address) and

correlates consumer households with that product or service (col. 10, line 63-col. 11, line 49 teaches a correlation which results in a demographic correlation and a product correlation; applying the product demographics vector to the demographics characterization vectors and the product preference vector from the consumer profile where a ratio of total products with a particular product ID purchase at that time to the product total purchases is determined; and other type of weighting, including running averages, statistical filtering techniques can be used to the purchase data to update demographic characterization vector).

However, Eldering does not expressly teach the additional running averages or statistical filtering techniques on the purchase data to update the demographic characterization vector being the act of utilizing the point of purchase data of the consumer households for that product or service and dividing it by the total households in that group to create a percentage of buying households. Eldering teaches all of the information contained in the equation, including a history of point of purchase information, or the number of consumer households for that product or service and the households in a group as well as the act of utilizing averages (where it is understood by one of ordinary skill in the art that an average number of households that purchase a product within a group would be the number of household that purchase the product divided by the total number of households within the group). Further, Examiner takes

Official Notice that taking an average to determine a percentage of usage is old and well known in the art.

Thus, it would have been obvious to one of ordinary skill in the art to apply the known method of averaging the consumer households in a group that have purchased a product or service, via the point of purchase information of Eldering, over the total consumers in a group, via the demographic characterization of Eldering, yielding the predictable results and resulted in an improved system. Further, since Eldering teaches that utilizing additional methods such as running averages or statistical filtering, one of ordinary skill in the art, knowing that collecting statistical information regarding consumers of a particular products and comparing those profiles against demographic data points of consumers is old and well known in the art (see col. 2, lines 26-30), would have recognized that applying the known averaging technique for these consumers would have yielded the predictable result of a percentage of buying households.

22. As per claim 2, Eldering in view of Official Notice teaches the percentage of buying households as claimed in claim 1. However, Eldering does not expressly teach indexing in descending order. Examiner takes Official Notice that indexing, or sorting, in descending order is old and well known in the art.

Thus, it would have been obvious to index the percentage of buying households in descending order in order to more efficiently determine which products or services have a higher demand, or rather which products or services to direct to consumers which will find them of interest (see col. 4, lines 21-25).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Szabo (US 6,868,525) teaches demographic measurement that does not infringe on the individual personal information of the consumers (col. 17, lines 1-37).

Srinivasan et al. (US Pub. 2001/0051932) teaches a percentage of customers who buy or who exhibit quantifiable interest in the product at a price (paragraph 82).

Jain et al. (Us Pub. 2003/0212619) teaches utilizing purchase histories to target customers.

Fowler et al. (US Pub. 2002/0026348) teaches databases for storing customer information and transaction information including cumulative data (paragraph 23).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALISON KARMELEK whose telephone number is (571)272-1808. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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